

# STATE OF COLORADO

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## Colorado Water Conservation Board Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Anna Mauss, P.E.  
Water Supply Planning and Finance Section

DATE: September 9, 2009

SUBJECT: **Agenda Item 7a, September 15-16 2009 Board Meeting**  
**Water Supply Planning and Finance Section – New Project Loans**  
**Fort Morgan Reservoir and Irrigation Company – Pipeline Project**

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Bill Ritter, Jr.  
Governor

Harris D. Sherman  
DNR Executive Director

Jennifer L. Gimbel  
CWCB Director

Dan McAuliffe  
CWCB Deputy Director

### Introduction

The Fort Morgan Reservoir and Irrigation Company (Company) is applying for a \$1,900,000 loan from the CWCB to construct its Pipeline Project (Project). The pipeline, along with pumps and recharge ponds, is being built to give the Company the ability to recapture and re-time its excess augmentation credits that accrue to the South Platte River. The Project is a cooperative project between the Company and Groves Farms. The estimated total project cost is \$2,388,500. See the attached Project Data Sheet for a location map and project summary.

### Staff Recommendation

Staff recommends the Board approve a loan not to exceed \$1,919,000 (\$1,900,000 for project costs and \$19,000 for the 1% Loan Service Fee) to the Fort Morgan Reservoir and Irrigation Company to construct the Pipeline Project from the Construction Fund. The loan terms shall be 30 years at a blended rate of 2.9% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Staff further recommends that if the Fort Morgan Reservoir and Irrigation Company is awarded a grant from the Water Supply Reserve Account statewide funds, this CWCB loan approval shall be reduced by such amount plus the 1% Loan Service Fee.

Staff also recommends that the following documents be submitted to the CWCB prior to disbursement of funds: 1) an executed copy of the operating agreement between Ft. Morgan Reservoir and Irrigation Company and Groves Farms; 2) documentation that all necessary easements from neighboring landowners along the pipeline route have been obtained.

## **Background**

The Company, located in Morgan County, runs an irrigation ditch system that serves surface water to approximately 15,000 acres of irrigated land, and operates a recharge and augmentation plan that provides augmentation water for approximately 90 wells for agricultural irrigation. Both irrigation and augmentation water are diverted from the South Platte River. Water deliveries are made through the Fort Morgan Canal to recharge sites and irrigation of lands lying south of the South Platte River between Weldona and Brush, Colorado.

In addition, the Company is finalizing an operational agreement for its recharge and augmentation project with Groves Farms, LLC, which is a family farming corporation also located in Morgan County. Groves Farms owns 9 wells and irrigates approximately 1,000 acres of land. Since 2003, Groves Farms has been developing its own augmentation plan to cover these wells and keep them pumping.

The Company, with Groves Farms' cooperation, has designed this Project to both re-divert and re-time augmentation credits from the Company's more senior recharge projects at certain times when they are not needed for direct augmentation use, and to divert water under junior water rights when available for recharge and augmentation use.

This Project will directly help sustain approximately 16,000 acres of irrigated agriculture in Morgan County, an area that has been hit hard by augmentation shortages. It will provide wildlife habitat benefits through water access at the recharge ponds while they contain water. The ponds will be located between Riverside Reservoir, Empire Reservoir, and Jackson Lake, which is a well-known area of importance for waterfowl and related wildlife.

## **Loan Feasibility Study**

The Loan Feasibility Study, "Feasibility Report for Pipeline Project" dated July 2009, was prepared by Cindy Vassios, Office Manager of the Company with technical assistance from Leroy Tobler, P.E. with the Civil Design Group and Tom Dea, P.E., TZA Water Engineers, Inc. The study was prepared in accordance with the CWCB guidelines and includes an alternative analysis, engineering design and cost estimates.

## **Fort Morgan Reservoir and Irrigation Company**

The Company is a mutual non-profit ditch company organized in 1882 and registered in the State of Colorado. There are approximately 128 shareholders and 2,844 shares. In addition to many farmers, shareholders include the City of Fort Morgan, the City of Brush, Western Sugar Cooperative and Public Service Company (XCEL Energy).

The Company is managed by a five-member board of directors. The board has the authority to set annual assessments to be paid by the shareholders, to take on debt, and the power to offer shareholders' stock for sale to pay assessments that remain delinquent.

## **Water Rights**

The Company has decreed water rights from the South Platte River, as well as pending applications for conditional water rights, that will provide the sources for its share of this Project. These rights are all decreed for augmentation use and have been diverted at times in the past when in priority to generate augmentation credits for the Company's augmentation plan.

In addition to the Company's water rights that can be utilized in this project, Groves Farms has pending applications in the Water Court (Water Division 1) that include the conditional water rights from the South Platte River that will be used in this Project, including shares in the Weldon Valley Ditch Company, Riverside Reservoir and Land Company, and Jackson Lake Reservoir Company.

The Company estimates that approximately 1,500 acre-feet per year could be re-timed through this Project. Additionally, the Company and Groves Farms estimate that approximately 500-1,000 acre feet per year could be developed by this Project under the Groves' junior water rights.

The total average annual water diversions by the Company are 37,058 acre-feet, based on water-years 1998 through 2008. The maximum diversion rate was 306 cfs. This water was diverted for all uses. For augmentation purposes, the total average annual diversions delivered to the augmentation sites, based on water-years 1998 through 2008, are 5,129 acre-feet.

## **Project Description**

The intent of this Project is to re-divert and re-time augmentation credits that accrue from the Company's more senior recharge projects from times when credits are not needed for direct augmentation use and also divert water under new junior water rights when available for recharge and augmentation use. Alternatives considered included:

1. The no-action alternative;
2. Diversion of water through Fort Morgan Canal headgate;
3. Pipeline to recharge ponds located on Groves Farms.

**Alternative No. 1** was considered unacceptable because without this Project, the Company would not be able to divert, re-time and reuse some of the excess water generated from the operation of its senior augmentation plan, nor could the Company divert other junior water rights that come into priority from time to time due to the over-appropriated nature of the South Platte River.

**Alternative No. 2** was ruled out because of the inability of the Company to divert water through the canal during the very cold winter months and the short distance from the Fort Morgan Canal to the South Platte River, making re-timing the water very inefficient.

**Alternative No. 3 (Selected Alternative)** was selected because the Company determined that by building a pipeline and recharge ponds, it could meet its goal of returning water to the South Platte River to meet augmentation requirements. After review of different locations for a

possible pipeline project, the selected location was determined to be ideal due to property ownership, land topography and land characteristics, and the ability to re-divert excess credits. It was also the most economically feasible option.

The Project involves installing one 24" pipe from the South Platte River extending three miles to recharge ponds on Groves Farms' land; installing two pumps to pump water from the river through the pipeline; installing one augmentation well and pumping equipment near Groves' ponds to pump water back to the river; and installing seven recharge/augmentation ponds (with a surface area of approximately 95 acres) on Groves Farms' land. This system will allow the Company to recapture and re-time the Company's excess augmentation credits that accrue to the South Platte River. Through the new pipeline, new junior diversions may be made and delivered to these new ponds on the Groves Farms' property. These junior diversions will produce augmentation credits that will accrue to the South Platte River and may be used immediately for augmentation or may be re-timed.

The Company will likely re-time water between November and March. Groves Farms will use the Project at different times when there is no call on the South Platte River or when freezing weather removes calls because senior ditches cannot divert.

The Company has decrees for its augmentation plan and is seeking decrees for additional recharge water rights. Groves Farms is seeking a decree for junior water rights and the augmentation plan that it operates.

Pending loan approval, the Project will be completed within 12-18 months. The Company estimates that final design will be complete within 90 days, pipeline construction will be complete within 150-200 days, river pump equipment installation and testing will be complete within 90 days, augmentation well and pump installation will be complete within 60 days, pond construction within 100 days, and final survey complete within 220 days. Some of the work will be completed simultaneously; so the total construction period is 220 days.

**TABLE 1**  
**PROJECT COST**

|              |                     |
|--------------|---------------------|
| Construction | \$ 2,036,500        |
| Engineering  | \$ 175,000          |
| Contingency  | \$ 177,000          |
| <b>TOTAL</b> | <b>\$ 2,388,500</b> |

## Financial Analysis

The Company shares are held by a mix of 91% agricultural, 7% low-income municipal, and 2% commercial owners. Blending these under the current interest rates, the Company qualifies for a 2.90% loan for a 30-year term.

The Company has been approved for a \$250,000 grant from the South Platte Basin Roundtable for this Project and has applied for an additional \$850,000 in statewide funds from the Water Supply Reserve Account. If the Company is awarded statewide grant funds at the September 2009 CWCB Board Meeting, the loan contract will be reduced by such amount.

**TABLE 2**  
**FINANCIAL SUMMARY**

|  |                  |
|--|------------------|
| Total Project Cost   | \$2,388,500      |
| WSRA South Platte Basin Grant Funds (approved by Basin)      | \$250,000        |
| <i>WSRA Statewide Grant Request (pending)</i>                | <i>\$850,000</i> |
| CWCB Loan Amount   | \$1,900,000      |
| CWCB Loan Amount (Including 1% Service Fee)                  | \$1,919,000      |
| CWCB Loan Payment  | \$96,645         |
| CWCB Loan Payment (Including 10% Reserve)                    | \$106,309        |
| Current Assessment per share                                 | \$109            |
| Future Assessment per share                                  | \$121            |
| Cost of Loan (with Reserve Account) per share (2,844 Shares) | \$37             |

**Creditworthiness:** The Company has the following two loans with Bank of the West in Fort Morgan:

**TABLE 3**  
**EXISTING DEBT**

| Loan Purpose           | Maturity Date | Remaining Amount | Annual Payment |
|------------------------|---------------|------------------|----------------|
| Chevy Pickup           | 2010          | \$13,105         | \$12,097       |
| 30-acre parcel of land | 2015          | \$104,000        | \$17,400       |

Neither of these existing loans have liens associated with the Company revenues.

**TABLE 4**  
**FINANCIAL RATIOS**

| <b>Financial Ratio</b>  | <b>Past 2 Years</b>                       | <b>Future<br/>w/ Project</b>                |
|---|---|---|
| Operating Ratio (revenues/expenses)<br>weak: <100% - average: 100% - 120% - strong: >120%                             | 114%<br>(Average)<br>\$599K/\$526K        | 100%<br>(Average)<br>\$632K/\$632K          |
| Debt Service Coverage Ratio<br>(revenues-expenses)/debt service<br>weak: <100% - average: 100% - 120% - strong: >120% | 355%<br>(Strong)<br>\$599K-496K/<br>\$29K | 100%<br>(Average)<br>\$632K-496K/<br>\$136K |
| Cash Reserves to Current Expenses<br>weak: <50% - average: 50% - 100% - strong: >100%                                 | 41%<br>(Weak)<br>\$216K/526K              | 34%<br>(Weak)<br>\$216K/632K                |
| Annual Operating Cost per Acre-Foot (37,058 AF)<br>weak: >\$20 - average: \$10 - \$20 - strong: <\$10                 | \$14<br>(Average)<br>\$526K/37K AF        | \$17<br>(Average)<br>\$632/37K AF           |

**Collateral:** As security for the loan, the Company will pledge its assessment revenues backed by a rate covenant and annual financial reporting. This is in compliance with the CWCB Financial Policy #5 (Collateral).

### **Staff Recommendation**

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cc: Cynthia Vassios, Office Manager, Fort Morgan Reservoir and Irrigation Company  
Susan Schneider, AGO

Attachment: Project Data Sheet

## CWCB Construction Loan Program Project Data Sheet

**Borrower:** Fort Morgan Res. & Irrigation Co.

**County:** Morgan

**Project Name:** Pipeline Project

**Project Type:** Augmentation/Pipeline Const.

**Drainage Basin:** South Platte

**Water Source(s):** South Platte River

**Total Project Cost:** \$2,388,500

**Funding Sources:** Construction Fund

**Type of Borrower:** Blended (Ag & Municipal  
& Commercial)

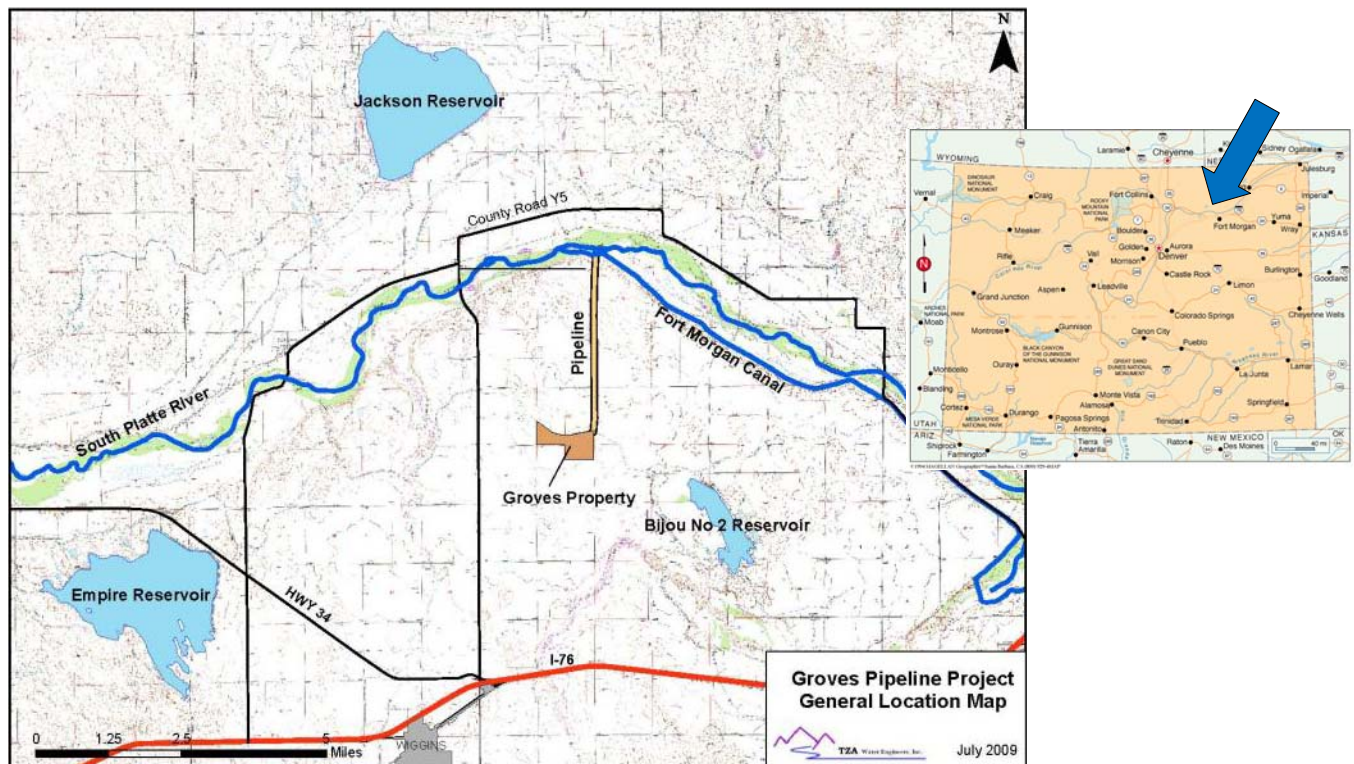
**Average Diversions:** 37,058 AF

**Loan Amount:** \$1,919,000 (Including 1% fee)

**Interest Rate:** 2.9%

**Term:** 30 years

The Company operates a ditch system that serves surface water to approximately 15,000 acres of irrigated land between Weldona and Brush, and operates a recharge and augmentation plan that provides augmentation water for approximately 90 irrigation wells. In addition, the Company has an operational agreement with Groves Farms, LLC, which is a family farming corporation also located in Morgan County, for a recharge/augmentation plan. The Company, with Groves Farms, has designed a plan to re-divert and re-time augmentation credits from the Company's more senior recharge projects at certain times when they are not needed for direct augmentation use, and to divert water under new junior water rights when available for recharge and augmentation use. The Project involves installing one 24" pipe from the River extending three miles to recharge ponds on Groves Farms' land; installing two pumps to pump water from the River through the pipeline; installing one augmentation well and pumping equipment near Groves' ponds to pump ground water back to the South Platte River; and installing seven recharge/augmentation ponds (with a surface area of approximately 95 acres) on Groves Farms' land. The Project will be completed within 12-18 months after loan approval.



**LOCATION MAP**